

AMENDED CLAIM SET:

1. – 6. (cancelled).

7. (currently amended) A method for producing a macrolide compound selected from the group consisting of (8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6-dihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,20,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,16,21-pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,20,21-pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-7-propanoyloxy-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxydocosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,5,6,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-5,7-diacetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,7-diacetoxy-6,21-dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-6-acetoxymethyl-3,6,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,20-trihydroxy-6,10,12,16,20-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide;

(8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (12E,14E)-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-9-oxo-18,19-epoxytricosa-12,14-dien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-2,6,10,12,16,20-hexamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,5,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-6-acetoxymethyl-3,6,7,21-tetrahydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7-trihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; a 3-position isomer of (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-6-acetoxy-3,7,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,21-tetrahydroxy-2,6,10,12,16,20-hexamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E,18E)-7-acetoxy-3,6,21,22-tetrahydroxy-6,10,12,16,20-pentamethyltricosa-8,12,14,18-tetraen-11-olide; (8E,12E,14E)-3,7,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,6-dihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-7-acetoxy-3,21-dihydroxy-10,12,16,20-tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-7-acetoxy-3,21-dihydroxy-10,12,16,20-tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-3,7,21-trihydroxy-10,12,16,20-tetramethyl-18,19-epoxy-6,6-(epoxymethano)tricosa-8,12,14-trien-11-olide; (4E,8E,12E,14E)-6,7-diacetoxy-3,21-dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-6,7-diacetoxy-3,21-dihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16-trihydroxy-6,10,12,16,20-pentamethyl-21-oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21,22-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide;

(4E,8E,12E,14E)-7-acetoxy-3,6,17,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-4,8,12,14-tetraen-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,5,6,21,22-pentahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,16-trihydroxy-6,10,12,16-tetramethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E,12E,14E)-3,6,7,21-tetrahydroxy-6,10,16,20-tetramethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17,21-tetrahydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,17-trihydroxy-6,10,12,16,18-pentamethyl-18,19-epoxyheneicosa-8,12,14-trien-11-olide; (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-5-oxo-18,19-epoxytricosa-8,12,14-trien-11-olide; and (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyltricosa-8,12,14,18-tetraen-11-olide, wherein a cyclodextrin is made to be present in said method comprising the steps of:

providing cyclodextrin in a culture broth of actinomycetes having an ability of producing the macrolide compound,

culturing said actinomycetes in said culture broth to produce the macrolide compound,
and

separating the macrolide compound from said culture broth.

8. (original) The method according to claim 7, wherein the macrolide compound is (8E,12E,14E)-7-acetoxy-3,6,21-trihydroxy-6,10,12,16,20-pentamethyl-18,19-epoxytricosa-8,12,14-trien-11-olide.

9. (original) The method according to claim 7 or 8, wherein the cyclodextrin is one selected from the group consisting of β -cyclodextrin, γ -cyclodextrin, partially methylated β -cyclodextrin, dimethyl- β -cyclodextrin, glycosyl- β -cyclodextrin and hydroxypropyl- β -cyclodextrin.

10. (new) The method according to claim 7, wherein the cyclodextrin is β -cyclodextrin.
11. (new) The method according to claim 7, wherein the cyclodextrin is γ -cyclodextrin.
12. (new) The method according to claim 7, wherein the cyclodextrin is partially methylated β -cyclodextrin.
13. (new) The method according to claim 7, wherein the cyclodextrin is dimethyl- β -cyclodextrin.
14. (new) The method according to claim 7, wherein the cyclodextrin is glycosyl- β -cyclodextrin.
15. (new) The method according to claim 7, wherein the cyclodextrin is hydroxypropyl- β -cyclodextrin.
16. (new) The method according to claim 7, wherein the concentration of the cyclodextrin in the culture broth is from 0.1 to 100 mg/mL.
17. (new) The method according to claim 7, wherein the concentration of the cyclodextrin in the culture broth is from 10 to 30 mg/mL.